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Application of a motor vehicle seat to avoid outside rotation of the thigh of a motor vehicle driver

The invention relates to the application of a motor vehicle seat comprising a padded backrest, a padded seat and a raised portion situated at the edge of the seat surface in form of a supporting part to avoid outside rotation of the motor vehicle driver's thigh during driving.

The usual seating position of the motor vehicle driver in the vehicle causes outside rotation of the right thigh, which thus falls outwards on the right side in vehicles usual in Germany. This does not only result in discomfort in the hip joint, but also in tension in the thigh as well as the hip-pelvis and lumbar region. Furthermore, pain in the leg and obstruction of the blood circulation can occur, if the thigh contacts the centre console.

Finally, tensions in the back and static discomfort in the lumbar-pelvis region occur. In the end this results in the exhaustion of the vehicle driver and this type of exhaustion is under certain circumstances a joint cause of the so-called microsleep.

It is the object of the invention, to avoid outside rotation of the driver's thigh when driving a car. This is achieved in that the supporting part comprises a shape tapering from the front towards the back, and the outer

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dimensions of which are formed adjustable, and wherein said supporting part is integrated into the padded seat or formed as a separately attachable supplementary part.

This problem is not addressed by any of the designs provided for known car seats (EO 0 670 238 A1, US 4 500 130, US 2002/0089220 A1).

The invention is explained below by way of example with reference to the drawing.

Fig. 1 shows a front view of a motor vehicle seat.

Fig. 2 shows a plan view of the motor vehicle seat illustrated in fig. 1.

In the figures, 10 denotes the backrest of a motor vehicle seat. The actual seat comprises a seating surface 11.

Such seats are widely known, wherein in the figures a tripartition of the backrest 10 and of the actual seat 11 is shown, such as can be found frequently in motor vehicle seats.

12 denotes a supporting part in the figures, which is attached at the boundary on the right-hand side (viewed from the driver) of the seat surface 11. It has a substantially triangular shape in cross-section, however with rounded-off portions. Viewed from above (fig. 2) it comprises substantially a kidney shape, i. e. it can taper

from the edge of the surface 11 backwards, towards the backrest.

13 denotes thigh and lower leg as cylindrical parts as well as the foot region of a person, not shown as such. It can be taken from this type of illustration, especially when viewing fig. 2, that the feared outside rotation of the driver's thigh cannot occur, instead thigh and lower leg remain in oriented position with regard to each other.

The embodiment of the motor vehicle seat shown in the figures is intended for a motor car, in which the driver sits on the left-hand side of the vehicle and actuates brake and accelerator pedal with his right foot. Motor vehicles intended for left-hand traffic are correspondingly equipped in laterally reversed manner.

At the side of the driver's seat nearer to the longitudinal axis of the motor vehicle, a raised portion situated at the edge is provided in the central to front region of the seat surface, which tapers off towards the front and the back and thus reduces or prevents, respectively, the outside rotation of the driver's thigh. This support against rotation can be designed variably (mechanically, pneumatically, hydraulically or electrically adjustable), in order to vary the position of the legs and enable an adjustment to anatomic differences between the individual car drivers thereby.

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Claim

Application of a motor vehicle seat comprising a padded backrest, a padded seat and a raised portion situated at the edge of the seat surface in form of a supporting part (12) to avoid the outside rotation of the thigh of a motor vehicle driver during driving, wherein said supporting part (12) comprises a shape tapering from the front towards the back and is formed adjustably in its outer dimensions, and wherein said supporting part (12) is integrated into the padded seat or is formed as a separate attachable supplementary part.

TRANSLATION OF CLAIM AS AMENDED UNDER ARTICLE 19

Claim

Application of a motor vehicle seat comprising a padded backrest, a padded seat and a raised portion situated at the edge of the seat surface in form of a supporting part (12) to avoid the outside rotation of the thigh of a motor vehicle driver during driving, wherein said supporting part (12) comprises a shape tapering from the front towards the back and is formed adjustably in its outer dimensions, and wherein said supporting part (12) is integrated into the padded seat or is formed as a separate attachable supplementary part.